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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/448,088	11/23/1999	EDWARD A. RICHLEY	D/98588	4649

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XEROX CORPORATION  
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ROCHESTER, NY 14644

[REDACTED] EXAMINER

LE, UYEN CHAU N

ART UNIT	PAPER NUMBER
2876	

DATE MAILED: 01/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

	Application No.	Applicant(s)
	09/448,088	RICHLEY ET AL.
	Examiner	Art Unit
	Uyen-Chau N. Le	2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 03 December 2002.

2a) This action is FINAL.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1 and 3-13 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1 and 3-13 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) Notice of References Cited (PTO-892)                    4) Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.  
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)                    5) Notice of Informal Patent Application (PTO-152)  
3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.                    6) Other: \_\_\_\_\_

**DETAILED ACTION**

***Prelim. Amdt/Amendment***

1. Receipt is acknowledged of the Amendment filed 03 December 2002.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1, 3, 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowers et al (US 5,963,134) in view of Harvey et al (US 5,463,463).

Re claims 1, 3, 4 and 9, Bowers et al discloses a system 10 for identification and tracking of tags 54 distributed in a room. The system comprising a base station 42 for scanning beam; a tag 54 reactive to incident beams; and a tag tracking system 52 receiving input from the base

station 42; the tag tracking system 52 storing state records of position and information content of the tag 54; wherein the tag 54 is passive (figs. 1-4; col. 7, line 8 through col. 10, line 64).

Bowers et al fails to teach or fairly suggest that the base station is a laser base station and that the tag tracking system determines angular position of the tag with respect to the laser base station and comprising at least two laser base stations wherein the tag tracking system determines absolute position of the tag.

Harvey et al teaches the above limitation with two lasers [14 & 16] for tracking the target 12 and determine the absolute angular position [ $x, y, z, \theta_1, \theta_2, \theta_3$ ] of the target 12 (figs. 1-5; col. 2, line 26 through col. 4, line 28).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the teachings of Harvey et al into the teachings of Bowers et al in order to provide Bowers et al with a more accurate system, wherein the laser beam would provide the system with a more accurate result and the exact location/position of an object can be established by determining its angular position. Furthermore, such modification would have Bowers et al with a more user-friendly system, in which it would provide the user an organized inventory storage record and would save a lot of time for the user in finding an object. Accordingly, such modification would have been an obvious extension as taught by Bowers et al, well within ordinary skill in the art, and therefore an obvious expedient.

5. Claims 5-8 and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowers et al as modified by Harvey et al as applied to claim 1 above, and further in view of Moran et al (US 6,005,482). The teachings of Bowers et al as modified by Harvey et al have been discussed above.

Re claims 5-8 and 10-13, Bowers et al/Harvey et al have been discussed above but fails to expressly disclose or fairly suggest that the tag is active, having an internal power supply to power a data broadcast element; an optical data output element; a radio data output element; an acoustic data output element.

Moran et al teaches the above limitation radio tags 110, infrared tags 116, acoustic tags 122 (figs. 2 & 3; col. 8, line 16 through col. 9, line 9).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the teachings of Moran et al into the teachings of Bowers et al/Huang in order to provide the user with the flexibility to retrieve the output data in various of forms (i.e., optical form, radio form, or acoustic form, etc.), and thus providing a more user-friendly system. Furthermore, such modification would have been an obvious extension as taught by Bowers et al/Harvey et al, well within ordinary skill in the art, and therefore an obvious expedient.

#### *Response to Arguments*

6. Applicant's arguments with respect to claims 1 and 3 have been considered but are moot in view of the new ground(s) of rejection.

A new ground of rejection has made to further meet the limitation of the newly amended claims 1 and 3 and the newly added claims 9-13.

7. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning (page 5, 2<sup>nd</sup> paragraph), it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight

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reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In response to applicant's argument that there is no suggestion to combine the references (page 6, 1<sup>st</sup> and 2<sup>nd</sup> paragraphs), the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the primary reference to Bowers et al discloses a system for identification and tracking of tags distributed in a room/library, the system comprising a base station for scanning a tag, which is reactive to the scanning beam to provide a data signal, and a tag tracking system receiving input from the base station and storing state records of position and information content of the tag (figs. 1-4; col. 7, line 8 through col. 10, line 64). However, Bowers is silent with respect to the base station is a laser base station and there is at least two laser base stations, and wherein the position of the object is determined specifically with its angular position respected to the laser base station(s). The secondary reference to Harvey et al teaches the above limitation by determining the angular position of an object/target with respect to the two laser projectors (figs. 1-5; col. 2, line 26 through col. 4, line 28). Accordingly, the claimed limitation, given its broadest reasonable interpretation, Bowers et al in view of Harvey et al meets the claimed invention (see the above discussion).

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The patents to Brown et al (US 4,790,651); Svetlinchny (US 3,741,653); Brown et al (EP 0,310,235) and McMurtry (WO 88/07656) are cited as of interest and illustrate a similar structure to a laser locating and tracking system for externally activated tags.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Uyen-Chau N. Le whose telephone number is 703-306-5588. The examiner can normally be reached on M,T, F: 6:00-6:30 and W&TH: 9:00-11:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MICHAEL G LEE can be reached on (703) 305-3503. The fax phone numbers for

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the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

*Uyen-Chau N. Le*  
Uyen-Chau N. Le

January 24, 2003

*[Signature]*  
MICHAEL G. LEE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800